

**Methods.**— Twenty-two patients are included and followed during epicondylitis treatment. The chosen patients, beside epicondylitis had a functional deficit with movement limitations of flexion. First group (12 patients) was treated with laser beam applied on painful areas. Ten patients in second group were treated with laser applied on acupunctural point SJ5, Li4, Li10, Li11, Pc3, Si8.

**Results.**— Analysing the VAS scale data it was estimated that high statistical significance in both groups is  $P < 0.001$ . While measuring ankle movement high statistical significance is achieved also in improvement of ankle flexion amplitude in both groups (Kruskal-Wallis test,  $P < 0.001$ ). Better pain relief and increased flexion was detected in group II laser acupuncture application (Mann-Whitney  $P < 0.05$ ).

**Conclusion.**— Analysis has clearly shown positive impact of laser therapy in pain relief, and ankle movement amplitude, with better results of laser applications on acupunctural points during treatment.

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### Effect of kinesiotaping in patients with chronic lumbar disc herniation: Randomized-controlled, double-blind study

B. Yavuz Keles, E. Yilmaz Yalcinkaya\*, B. Gunduz, A. Bardak, B. Erhan

Istanbul Physical Therapy Rehabilitation Training and Research Hospital, Istanbul, Turkey

\*Corresponding author.

**Keywords:** Chronic low back pain; Kinesiotaping; Oswestry Disability Index; Health Assessment Questionnaire

**Introduction.**— We aimed to investigate the effects of KinesioTape (KT) on patients with chronic low back pain due to lumbar disc herniation.

**Material and methods.**— Patients with low back pain more than 3 months diagnosed as lumbar disc herniation, aged between 25–45-years-old were randomized to the KT ( $n:32$ ) or sham taping ( $n:28$ ) group. All the patients were prescribed home exercises for lumbar disc herniation; taping was done 3 times, once a week either with KT or sham tape. Patients were evaluated at the beginning, 3rd, 6th and 12th weeks by a blinded physiatrist. Visual Analog Scale (VAS), Health Assessment Questionnaire (HAQ), Oswestry Disability index (ODI) and number of paracetamol tablets taken were used for evaluation.

**Results.**— Mean age was  $37.3 \pm 6.6$  years. The demographic and clinical features of the two groups were similar at the beginning. There was significant improvement at all the parameters at the 3rd week in both groups; but the improvement continued to 12th week (HAQ and VAS) in the taping group only. The patients in the sham group needed more analgesic after 3rd week.

**Discussion.**— Kinesiotaping is effective in increasing function, decreasing pain, need for analgesic medication in patients with chronic lumbar disc herniation.

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### Lumbar disc prosthesis and physical and sports activities: A monocentric study with 83 patients

G. Muffa\*, M.E. Isner-Horobeti<sup>a</sup>, C. Muhl<sup>a</sup>, J. Masat<sup>a</sup>, J.P. Steib<sup>b</sup>, P. Vautravers<sup>a</sup>, J. Lecocq<sup>a</sup>

<sup>a</sup> Institut Universitaire de Réadaptation Clémenceau, Marlenheim, France

<sup>b</sup> Service de Chirurgie du Rachis, Hôpitaux Universitaires de Strasbourg, Strasbourg, France

\*Corresponding author.

**Keywords:** Lumbar disc prosthesis; Physical and sports activities; Chronic lumbalgia

**Introduction.**— Surgical treatment by disc prosthesis of chronic lumbalgia for disc insufficiency is an alternative to the treatment by arthrodesis, particularly in physically active patients, eager to continue exercising their practice. In terms of efficacy on pain, both treatments have similar results; however, the treatment by prosthesis enables preserving the mobility of the operated spinal segment.

**Objective.**— To evaluate the impact of physical and sports activities on the evolution in terms of pain, quality of life and delay before resuming work.

**Methods.**— Eighty-three patients who had disc prosthesis surgery for lumbar disc degeneration between 2003 and 2008. The 83 patients with disc prosthesis surgery were distributed into three groups, according to their level of physical and sports activity: intensive physical and sports activity, regular physical and sports activity, and settled way of life.

**Results.**— After a mean follow-up of 36 months, the results in terms of pain, quality of life and delay before resuming work are all better for subjects with intensive physical and sports activity, highlighting the beneficial role of physical and sports activity, on the effects of a surgical treatment by lumbar disc prosthesis.

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### Clinical effects of different therapeutic models in tendinitis supraspinatus

V. Bajec<sup>a</sup>, S. Janjic<sup>a</sup>, G. Radunovic<sup>a</sup>, L. Konstantinovic<sup>b</sup>, B. Stojic<sup>a</sup>

<sup>a</sup> Institut of Rheumatology, Belgrade, Serbia

<sup>b</sup> Clinic of Rehabilitation, Belgrade, Serbia

**Keywords:** Tendinitis supraspinatus; Laserotherapy; Corticosteroid infiltration; Acupuncture

Clinical effects of different therapies in tendinitis supraspinatus. Leading pathological cause is tendon inflammation followed by hypervascularisation and oedema. Main clinical manifestations are pain and impaired function.

**Objectives.**— To establish therapeutic effects of three different therapeutic models: low level laserotherapy (LLT), local corticosteroid infiltration (LCI) and acupuncture (A), on subjective symptoms and objective signs, in painful shoulder syndrome caused by tendinitis supraspinatus. To compare effects of the three different therapeutic models.

**Methods.**— Randomised prospective clinical study included 36 patients with chronic shoulder pain, comparable with regard to sex, age, concomitant diseases. Diagnosis was made with regard to clinical, radiological, ultrasonographic examination. Patients were divided in three therapeutic groups (12 patients). I-group: treated with laserotherapy. Midlaser, Irradia, 904 nm, f5000 Hz. Ten points located in inflammatory region, daily dose of 10 J/cm<sup>2</sup>. X days. II-group: treated with LCI/Betamethasone Diprofos<sup>®</sup> 1 mL/in inflammatory region. III-group: treated with acupuncture (LI4, G38, UB57, LI11, LI15, LI16, 4 pain-tender-points), NoX. All of the patients were given pendular free-swinging exercises. Measured parameters were: local functional status-measured with Constant Murley functional scale. Wilcoxon test and Kruskal-Wallis test was used for statistical analysis.

**Results.**— Highly significant statistical difference was fortified before and after the treatment in every of the three therapeutic groups (Wilcoxon,  $P < 0.001$ ). There was no significant difference among therapeutic groups (Kruskal-Wallis,  $P < 0.05$ ).

**Conclusion.**— In patients with tendinitis supraspinatus, laserotherapy, Diprofos<sup>®</sup> and acupuncture are highly effective for functional status improving.

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### Effects of lumbar orthosis on postural control strategies in subacute low back pain

F. Munoz<sup>a,\*</sup>, J.F. Salmochi<sup>b</sup>, P. Rougier<sup>c</sup>

<sup>a</sup> ALTEOR, CROLLES, France

<sup>b</sup> Clinique du Parc, Lyon, France

<sup>c</sup> Laboratoire de Physiologie de l'Exercice, Université de Savoie, France

\*Corresponding author.

Some low back pain (LBP) patients demonstrate a rigid postural control strategy induced by a persistent and excessive muscular co-activation of the trunk. The aim of this study was to measure the effect of different lumbar orthosis (LO) designs for preventing the occurrence of this fear-avoidance strategy. Twelve